Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

What We Claim Is:

1. (currently amended) A computer implemented method for processing data for a spreadsheet system model, including the steps of:

providing a spreadsheet model specification in a computer system, the spreadsheet model specification including a plurality of types of item, in respect of which entries may potentially be provided in a spreadsheet to which the spreadsheet system model relates, the types of item including:

at least one first item type wherein first-item associated data is ~~obtained from~~ input data input into the computer system; and

at least ~~one~~ two second item types wherein second-item associated data ~~is~~ can be obtained from an operation performed on ~~first~~ stored data, associated with at least ~~third item~~ one of said first or second item types, stored in a first database;

inputting ~~second~~ said input data into the system;

automatically searching the ~~second~~ input data for at least one first item type;

automatically storing ~~second~~ data associated with said at least one first item type found by the searching step, in the first database,

automatically ~~reading a second item type from the at least one second item types in a determining step including~~ performing an iterative determining process for determining whether the first database includes one or more prerequisite items necessary to determine each of the second item types, the iterative determining process comprising performing a plurality of iterations:

wherein each iteration comprises successively automatically reading second item types and, for each read second item type, determining whether the first database includes ~~a~~ one or more prerequisite items necessary to determine ~~the~~ that second item type, ~~by obtaining third~~

~~associated data from an operation performed on third data associated with at least one fourth item stored~~ and if the first database does include said one or more prerequisite items necessary to determine said second item type, automatically storing ~~the~~ that second item type in the first database ~~if the prerequisite item is present~~;

~~for each remaining second item type in the at least one second item type, performing the steps of automatically reading and automatically storing each remaining second item type in the first database if the prerequisite item is present.~~

wherein the iterative determining process is terminated when an iteration does not result in storage in the first database of a second item type which was not previously stored in the first database; and

wherein, at the termination of the iterative determining process, the storage of an item type in the first database is an indication that the stored item type may usefully be included in a spreadsheet in accordance with the spreadsheet system model; and

automatically outputting an indication that the spreadsheet system model can be produced if items of the model specification are stored into the first database.

2. (cancelled)

3. (cancelled)

4. (currently amended) The method as claimed in claim 1 ~~further comprising: incorporating an~~ wherein in the iterative determining process successively automatically ~~of~~ reading ~~said~~ second item types comprises successively automatically reading only second item types not stored in the first database ~~whenever said second item type is stored in the first database~~.

5. (previously presented) The method as claimed in claim 1 wherein said first database further comprises modules; and, said method further comprising the step of storing said first item types in said modules.

6. (previously presented) The method as claimed in claim 5 further comprising: configuring each said module to perform operations on said data associated with said first item types having at least one similar characteristic which are stored in a same said module.

7. (currently amended) The method as claimed in claim 1 further comprising the step of

sorting said ~~plurality of types of items and said associated data~~ at least one first item type and said at least two second item types, said first-item associated data, and said second-item associated data as said ~~plurality of types of items and said associated data~~ at least one first item type and said at least two second item types, and said second-item associated data are stored in the first database.

8. (currently amended) The method as claimed in claim 1 wherein said at least one first item type and said at least two second item types ~~plurality of types of items~~ further comprise[[s]] predetermined items; and, said method further comprising: the system producing an output indication if said predetermined items are stored in the first database.

9. (currently amended) The method as claimed in claim 1 further comprising the step of determining whether a second item type from said at least ~~one~~ two second item types can be stored in the first database by associating the second item type with an item determinant which specifies the or each prerequisite item for evaluation of the second item type.

10. (previously presented) The method as claimed in claim 9 further comprising a determinant step of searching the first database for the or each prerequisite item of the second item type.

11. (original) The method as claimed in claim 10 wherein the determining step includes a Boolean operation which produces a true or false result depending on whether the or each prerequisite item is located in the first database.

12. (original) The method as claimed in claim 11 wherein the first database includes one or more separate storage areas.

13. (currently amended) The method as claimed in claim 12 wherein the result of said determining step is true if the or each prerequisite item[[s]] is ~~are~~ located in the first database.

14. (currently amended) The method as claimed in claim 1 wherein said at least one first item type and said at least two second item types ~~plurality of types of items~~ further comprise[[s]] input items and the at least one first item type[[s]] corresponds to said input items.

15. (previously presented) The method as claimed in claim 1 wherein the second item types have corresponding item determinants.

16. (currently amended) The method as claimed in claim 1 wherein said at least one first item type and said at least two second item types ~~plurality of types of items~~ further comprise[[s]] non-input items and the second item types are said non-input items.

17. (currently amended) The method as claimed in claim 15 [[14]] further comprising the step of adding a second item type from said at least ~~one~~ two second item type to the first

database if the associated item determinant evaluates to true.

18. (currently amended) The method as claimed in claim 17 ~~wherein said plurality of types of items includes fourth items; and, the method~~ further comprising the step of providing a consolidated storage array for storing ~~said fourth~~ items of the second type and for evaluating said item determinants.

19. (previously presented) The method as claimed in claim 18 further comprising the step of evaluating the item determinant for each said second item type not stored in the first database.

20. (previously presented) The method as claimed in claim 19 further comprising the step of storing in the first database each said second item type for which the item determinant is true.

21. (previously presented) The method as claimed in claim 20 further comprising the step of storing said second item types in a second database if associated prerequisite items for said second item types are not located in the first database.

22. (previously presented) The method as claimed in claim 21 further comprising the step of repeating the evaluating step for any said second item type in the second database.

23. (currently amended) The method as claimed in claim 22 further comprising the storage step of ~~repeating the storage step for~~ storing in the first database each said second item type stored in the second database for which the item determinant is evaluated as true by the repeated evaluation step.

24. (previously presented) The method as claimed in claim 23 wherein the evaluating and storing steps are repeated until the storage step results in no additional said second item types being added to the first database.

25. (previously presented) The method as claimed in claim 23 further comprising repeating the evaluating and storing steps until all said evaluated item determinants are false.

26. (original) The method as claimed in claim 23 wherein the second database comprises a consolidated instance array.

27. (currently amended) The method as claimed in claim 26 further comprising the step of adding said second items for which the item determinants ~~instances~~ evaluate to false to the second database.

28. (previously presented) The method as claimed in claim 27 wherein any said second item added to the first database after the evaluating step is performed on the second database results in the removal of said added second item from the second database.

29. (currently amended) The method as claimed in claim 28 wherein the evaluation step is

repeated on said second item types remaining in the second database if the remaining second item type is transferred to the first database.

30. (previously presented) The method as claimed in claim 29 further comprising the step of storing formula for said second item types in a formula database and evaluating each said first and/or second item type stored in the first database in accordance with an associated formula stored in a formula database.

31. (currently amended) The method as claimed in claim 30 further comprising the step of associating with each said second item type all of said first at least one item type[[s]] and/or said at least two second item types required before the second item type can be evaluated.

32. (cancelled)

33. (new) The method as claimed in claim 1, wherein the computer system determines which second item types to read by determining which second item types could exist, based on data in the first database.

34. (new) The method as claimed in claim 1, wherein the spreadsheet model specification includes said at least two second item types by at least one of: listing a plurality of second item types; or, defining one or more classes of the second item type, from which a number of unambiguously identifiable second item types can be determined.

35. (new) The method as claimed in claim 1 further comprising a step of automatically outputting a list of the first and second item types stored in the first database which can be usefully included in a spreadsheet in accordance with the spreadsheet system model.